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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,413	04/19/2004	Jun-Hyuk Lee	P57053	9895

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EXAMINER	
VU, MICHAEL T	

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/826,413	LEE ET AL.	
	Examiner	Art Unit	
	Michael Vu	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☒ Claim(s) *10-17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *04/19/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 - 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/826320. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of the pending claims encompasses a similar invention as recited in the copending claims.

Both applicants are similarity comprising a Private EV-DO wireless network coupled to a Public EV-DO wireless network included a relay unit, call processor, and session information request signal and generated by the call processor from or to a public network data location register being received between a Private and Public wireless networks.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayers (US 2003/0186694) in view of Ray (US 2003/0135626).

Regarding **claim 1**. Sayers teaches a system comprising: a private EV-DO wireless network coupled to a public EV-DO wireless network including a data location register adapted to provide private EV-DO wireless data service (Fig. 1 and Fig. 2,

Public & Private Networks), a relay unit adapted to relay a corresponding call connection request signal upon the call connection request signal being received from a terminal entering the private EV-DO wireless network (Fig. 2, Private Wireless Network, element 22-1, and Hub 23); **but is silent on** a call processor adapted to generate a session information request signal with respect to the corresponding terminal upon the call connection request signal relayed from the relay unit being a first call connection request signal, and to process a call by assigning a traffic channel to the connection terminal according to the received session information upon the session information corresponding to the requested session information request signal being received; and a session information processor adapted to request a session information request signal of the corresponding terminal generated by the call processor to a public network data location register in the public EV-DO wireless network, to store session information of the corresponding terminal received from the public network data location register, and to provide the call processor with the session information of the corresponding terminal.

However, Ray teaches a system that contains the source access networks that routing the session information back to the target access network, and shared state between the Access Terminal and Access Network, which shared state stores the protocols and the protocol configurations that are used for communication between the Access Terminal and Access Network such as Point-to-Point Protocol (PPP), or Link Control Protocol (LCP) to negotiations for access authentication, and further the physical traffic channel being assigned (Abstract, [0005-0009, 0028, 0034, 0037]). As Examiner noted that the data location register from public to private network does not

need to store the information for the first time. At least two or more times then stored in the Private-Data Location Register (DLR).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sayers, such that a call processor adapted to generate a session information request signal with respect to the corresponding terminal upon the call connection request signal relayed from the relay unit being a first call connection request signal, and to process a call by assigning a traffic channel to the connection terminal according to the received session information upon the session information corresponding to the requested session information request signal being received; and a session information processor adapted to request a session information request signal of the corresponding terminal generated by the call processor to a public network data location register in the public EV-DO wireless network, to store session information of the corresponding terminal received from the public network data location register, and to provide the call processor with the session information of the corresponding terminal, to meet the increasing demand for the Wireless High-Speed Data System with an efficiency and a low data rates while transfer data from the source to the target.

Regarding **claim 2**. Sayers/Ray teach the system according to claim 1, Sayers further teaches wherein the session information processor comprises a database adapted to store the session information of the corresponding terminal received from the public network data location register In order to adequately maintain contact with the network subscribers the GSM PLMN employs a number of databases. (The main

database functions are provided by two Location Registers, known as the Home location Register (HLR) and Visitor Locations Register (VLR). The Home Location Register (HLR) contains all the information related to an operators subscriber database. The HLR is the main database for a network. The HLR stores both static and dynamic data related to the subscriber. Static data includes items such as International Mobile Subscriber Identity (IMSI), subscriber MSISDN number and registered supplementary services [0048-0049] of Sayers).

Regarding **claim 3**. Sayers/Ray teach the system according to claim 1, Ray further teaches wherein the session information of the corresponding terminal received from the public network data location comprises authentication information for authenticating the private EV-DO wireless network of the terminal ([0026, 0030] of Ray).

Regarding **claim 4**. Sayers/Ray teach the system according to claim 1, Sayers further teaches wherein the session information processor comprises an authentication unit adapted to determine whether the corresponding terminal is a terminal registered in the private EV-DO wireless network using the private EV-DO wireless network authentication information of the terminal included in the session information of the corresponding terminal received from the public network data location register (Fig. 9 [0228-0232] of Sayers).

Regarding **claim 5**. Sayers/Ray teach the system according to claim 1, Sayers further teaches wherein the session information processor is coupled to a data location register of the public EV-DO wireless network with a dedicated line ([0042] of Sayers).

Regarding **claim 6**. Sayers/Ray teach the system according to claim 1, Ray further teaches wherein the session information processor provides the call processor with the session information of the corresponding terminal stored in the database upon the first call being connected to the database in the session information processor without requesting the session information of the corresponding terminal from the public data location register of the public EV-DO wireless network upon the connected call of the terminal received through the relay unit being a second or further connection call. As Ray noted that a data session shared state between the Access Terminal (AT) and Access Network (AN), this shared state stores the protocols and protocol configurations that are used for communication between those two connections AT and AN ([0028, 0037, 0045 of Ray).

Regarding **claim 7**. Sayers/Ray teach the system according to claim 1, Sayers further teaches wherein the relay unit comprises a temporary identifier information generator adapted to add temporary identifier information to a call connection request signal transmitted to the call processor upon a call of the terminal entering the private EV-DO wireless network being connected, the temporary identifier information being used to determine whether a corresponding call is a connection call to be connected to the public EV-DO wireless network, or a connection call to be connected to the private EV-DO wireless network ([0221-0222] of Sayers).

Regarding **claim 8**. Sayers/Ray teach the system according to claim 1, Sayers further teaches wherein the call processor comprises a routing module adapted to determine whether the corresponding terminal connection call is a private EV-DO

wireless network connection call or a public EV-DO wireless network connection call, according to the temporary identifier information included in the call connection request signal transmitted from the relay unit, and to route the corresponding connection call to the private EV-DO wireless network or the public EV-DO wireless network in accordance with a result of the determination ([0221-0222] of Sayers).

Regarding **claim 9**. Sayers/Ray teach the system according to claim 1, Sayers further teaches further comprising a data packet service node adapted to provide a corresponding terminal with data through an Intranet in the private EV-DO wireless network through the call processor upon a traffic channel to the corresponding terminal being assigned from the call processor and the call being processed ([0031, 0124] of Sayers).

Allowable Subject Matter

5. Claims 10-17 are allowed.

6. The following is an examiner's statement of reasons for allowance: Claims 10-17 are allowed over newly submitted prior art Sayers and Ray, while teaching a system and a method which is improving the data session information management when communicating between the Access Terminal (AT) and Access Network (AN). The prior art cited fails to teach the claimed combination of features. And the examiner notes that the limitations of claims 10-17 are novel over the prior art of record (Sayers and Ray). This limitations as disclosed in the specific manner of determining in the private data location register whether the session information requested from the private control

station is registered in a database and determining that the session information of the corresponding terminal is the first private EV-DO wireless network connection call and requesting the session information of the corresponding terminal to a public data location register of the public EV-DO wireless network upon the session information of the corresponding terminal not being registered and receiving the session information of the corresponding terminal from the public data location register; performing private authentication of the corresponding terminal in the private data location register using the session information of the received corresponding terminal and transmitting the session information of the corresponding terminal to the private control station and storing the corresponding session information in the database; and assigning a traffic channel of the corresponding terminal according to the session information of the terminal transmitted from the private data location register and performing data service through the assigned channel with the private control station.

Regarding **claim 11**. The prior art made of record fails to clearly teach or fairly suggest, the method according to claim 10, wherein, in transmitting the call connection request signal to the private control station, upon the private base station transmitting a call connection request signal to the control station, the private base station transmits the call connection request signal and additionally transmits temporary identifier information used to determine whether the corresponding call is a public EV-DO wireless network connection call or a private EV-DO wireless network connection call.

Regarding **claim 12**. The prior art made of record fails to clearly teach or fairly suggest, the method according to claim 10, wherein requesting the session information

of the terminal to the private data location register includes analyzing temporary identifier information included in the call connection request signal transmitted from the private base station in the private control station, and selectively routing a corresponding call connection request signal to the private data location register of the public EV-DO wireless network or the private EV-DO wireless network in accordance with a result of the analysis.

Regarding **claim 13**. The prior art made of record fails to clearly teach or fairly suggest, the method according to claim 10, wherein, in receiving the session information of the corresponding terminal from the public data location register, upon the session information requested from the private control station being registered in the database, the private data location register determines that the call connection of the corresponding terminal is not the first call connection but a second or further connection call and provides the control station with the session information of the terminal stored in the database.

Regarding **claim 14**. The prior art made of record fails to clearly teach or fairly suggest, a method comprising: providing a private EV-DO wireless network system coupled to a public EV-DO wireless network system including a public data location register; determining whether a call connection of a corresponding terminal is a private EV-DO wireless network connection call or a public EV-DO wireless network connection call upon a call connection being requested from a terminal entering the private EV-DO wireless network; determining whether session information for the corresponding terminal exists in a database upon a determination that the corresponding call is a

private EV-DO wireless network connection call; requesting the session information of the terminal for processing a call of the corresponding terminal to a public data location register located in the public EV-DO wireless network upon a determination that the session information of the corresponding terminal does not exist in the database; performing private authentication of the corresponding terminal using authentication information included in the session information of the received corresponding terminal upon the session information of the corresponding terminal being received from the public data location register; and assigning a traffic channel of the corresponding terminal using session information of the corresponding terminal and performing data service to the terminal through the assigned channel upon the authentication of the terminal being completed after storing the session information of the corresponding terminal in the database.

Regarding **claim 15**. The prior art made of record fails to clearly teach or fairly suggest, the method according to claim 14, wherein, in determining whether the call connection of the corresponding terminal is the private EV-DO wireless network connection call or the public EV-DO wireless network connection call, a temporary identifier for determining whether the corresponding connection call is the private EV-DO wireless network connection call or the public EV-DO wireless network connection call is assigned to the corresponding call connection request signal, and a determination is made as to whether the corresponding connection call is the public EV-DO wireless network connection call or the private EV-DO wireless network connection call

according to the assigned temporary identifier upon the call connection being requested from the terminal.

Regarding **claim 16**. The prior art made of record fails to clearly teach or fairly suggest, he method according to claim 15, wherein a connection request signal for the corresponding call is routed to the control station of the public EV-DO wireless network, upon the connection call of the terminal being the public EV-DO wireless network connection call.

Regarding **claim 17**. The prior art made of record fails to clearly teach or fairly suggest, he method according to claim 14, wherein determining whether the session information for the corresponding terminal exists in the database includes determining that the connection call of the corresponding terminal is a second or further connection call and assigning the traffic channel of the corresponding terminal using the session information of the corresponding terminal stored in the database and performing data service to the terminal through the assigned channel upon the session information for the corresponding terminal existing in the database.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Sayers US 2005/0059390

2. Sayers US 2003/0186694

3. Ray US 2003/0135626

4. Chang US 2003/0223427

5. Chang US 2004/0203771

6. Kim US 2004/0048610

7. Mohammed US 2005/0207395

8. Waylett US 2005/0088999

9. Peng US 2003/0145091

10. Kong US 20040185879

11. Kim US 2004/0218587

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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